



TEXAS HISTORICAL COMMISSION
real places telling real stories

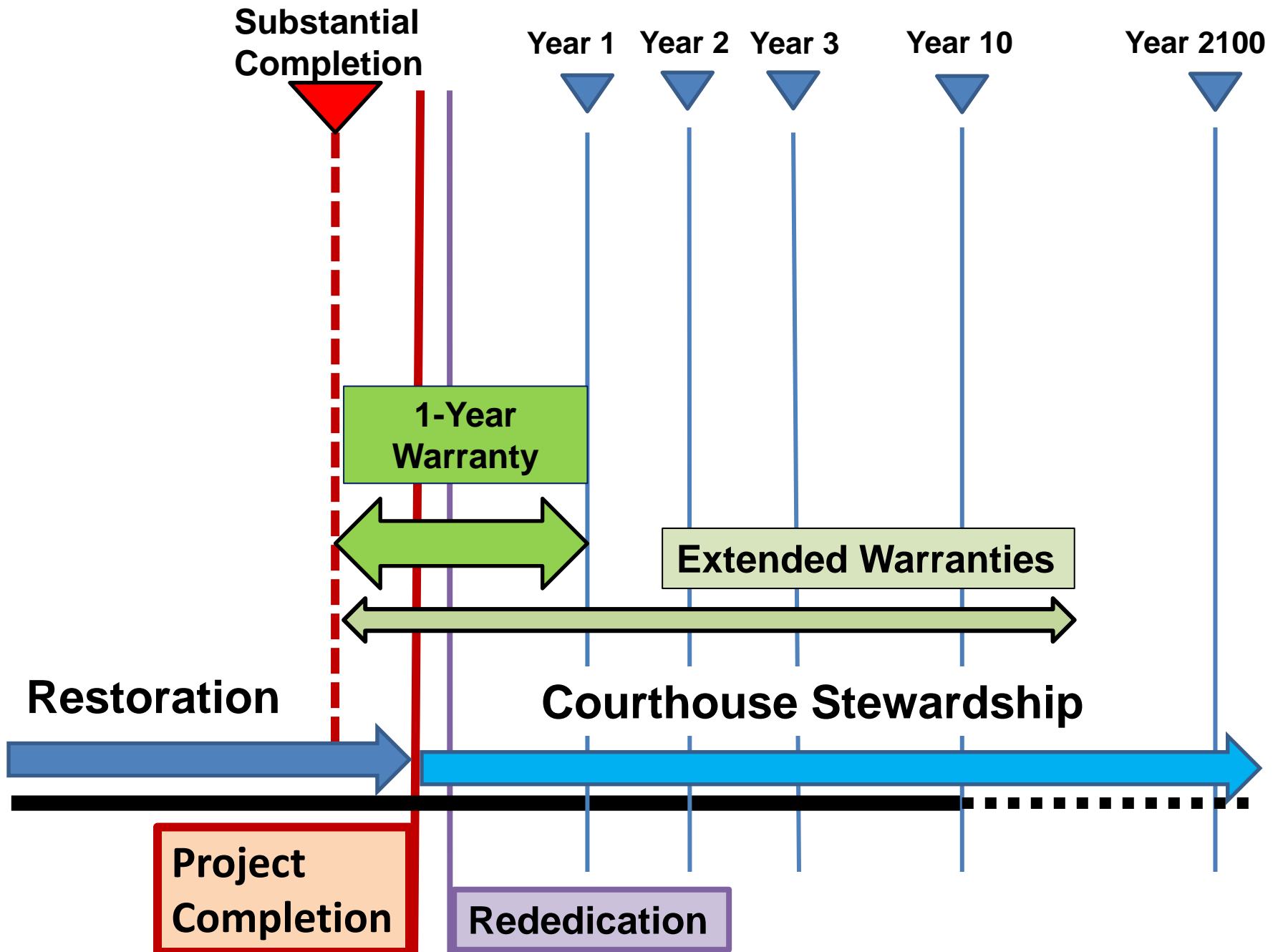
Managing the Transition from Restoration Back to County Responsibility



Dennis Cordes, THC
Texas Courthouse Stewardship Workshop
May 24-25, 2012
Austin , Texas

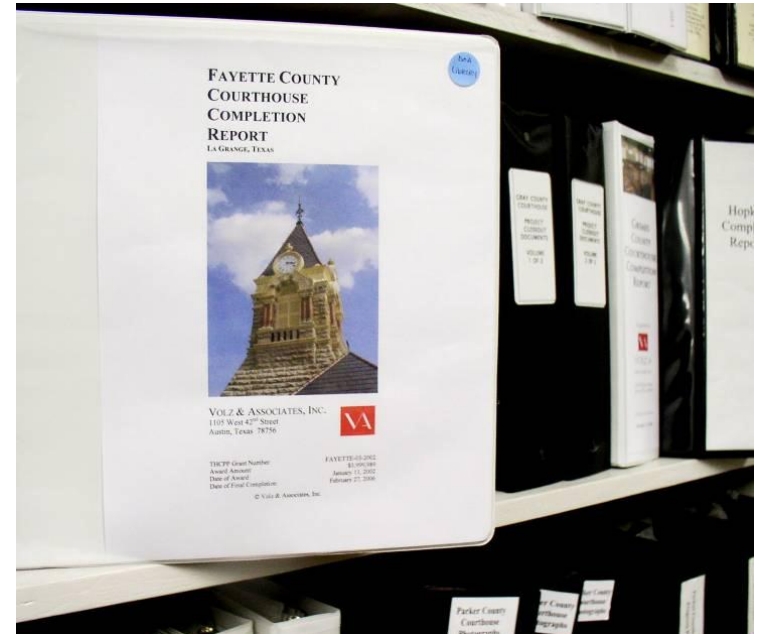
- **Managing the Transition from Restoration, Back to the County**

- **Managing the Conclusion of the Restoration**
- **Taking Full Advantage of Provisions in the Restoration Contract**
- **Preparing for Predictive & Preventive Maintenance of Restored Condition**
- **Setting Up Stewardship Library to Support Funding and Maintenance**



Actively Build Your Stewardship Library

- Use as the Source of All Information about Your Courthouse
- Add to Your Library Continually -
Materials, Dates of Work, Costs, Contractors,
Forecasting Preventive Work , Life Cycle of Systems and
Materials, Maintenance History



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Transition Starts at Substantial Completion



Punch List Inspection

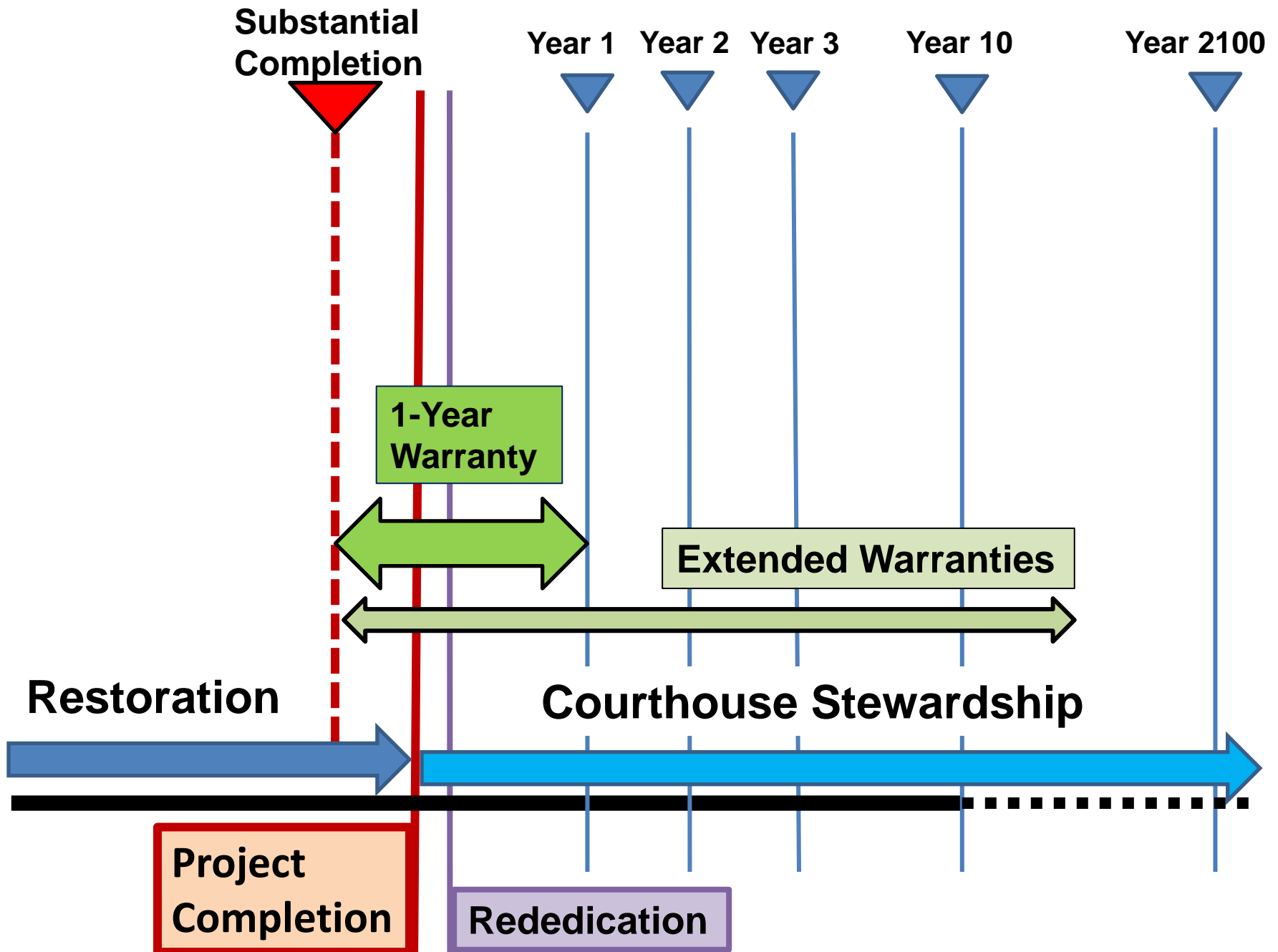
- Conducted Prior to declaring Substantially Complete
- Conducted by Architect & Engineer with Contractor, Project Manager, County Project Manager & Maintenance Supervisor, THC Project Reviewer

Transition Starts Before Substantial Completion Inspection



County Inspection

- To Be Full Participant in Substantial Completion Inspection
- County should conduct its own inspection list **Prior To** the formal Inspection
- Remember - Construction Documents determine the Work Requirements and Completeness



Substantial Completion Date - Warranty Period Begins

CERTIFICATE OF SUBSTANTIAL COMPLETION		OWNER ARCHITECT CONTRACTOR FIELD OTHER	XXXX
AIA DOCUMENT G704 (Instructions on reverse side)			
PROJECT: (Name and address)	Llano County Courthouse 801 Ford Street Llano, Texas 78643	PROJECT NO.: CONTRACT FOR: CONTRACT DATE:	VA # 009-2002 Restoration June 11, 2001 8/6/02
TO OWNER: (Name and address)	Llano County 801 Ford Street Llano, Texas 78643	TO CONTRACTOR: (Name and address)	Phoenix I Restoration and Construction, Ltd. 9411 Hargrove Dallas, Texas 75220
DATE OF ISSUANCE: August 6, 2002 PROJECT OR DESIGNATED PORTION SHALL INCLUDE: All interior and exterior restoration as described in Construction Documents dated April 4, 2001, EXCLUDING roof finish and pyramidal roof caps. Note attached Substantial Completion Punch List of work to be completed prior to Final Completion. The Work performed under this Contract has been reviewed and found, to the Architect's best knowledge, information and belief, to be substantially complete. Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use. The date of Substantial Completion of the Project or portion thereof designated above is hereby established as August 1, 2002 which is also the date of commencement of applicable warranties required by the Contract Documents, except as stated below: Roof warranty as provided by Phoenix I Restoration and Construction, Ltd. for sheet metal and decorative sheet metal roofing. A list of items to be completed or corrected is attached hereto. The failure to include any items on such list does not alter the respon- sibility of the Contractor to complete all Work in accordance with the Contract Documents. Volz & Associates, Inc. BY <i>[Signature]</i> DATE 8/6/02 ARCHITECT The Contractor will complete or correct the Work on the list of items attached hereto within _____ days from the above date of Substantial Completion. Phoenix I Restoration and Construction, Ltd. BY <i>[Signature]</i> DATE 8/6/02 CONTRACTOR The Owner accepts the Work or designated portion thereof as substantially complete and will assume full possession thereof at 4:00 pm CST (time) on August 1, 2002 (date). Llano County BY <i>[Signature]</i> DATE 8/6/02 OWNER The responsibilities of the Owner and the Contractor for security, maintenance, heat, utilities, damage to the Work and insurance shall be as follows: (Note—Owner's and Contractor's legal and insurance counsel should determine and review insurance requirements and coverage.) AIA CAUTION: You should use an original AIA document which has this caution printed in red. An original assures that changes will not be obscured as may occur when documents are reproduced. AIA DOCUMENT G704 • CERTIFICATE OF SUBSTANTIAL COMPLETION • 1992 EDITION • AIA • ©1992 • THE AMERICAN INSTITUTE OF ARCHITECTS, 1735 NEW YORK AVENUE, N.W., WASHINGTON, D.C. 20006-1202			

“...progress of the Work...is sufficiently complete...so the Owner can occupy the Work for its intended use. ...also the date of commencement of applicable

PROJECT OR DESIGNATED PORTION SHALL INCLUDE:

All interior and exterior restoration as described in Construction Documents da
pyramidal roof caps.

Note attached Substantial Completion Punch List of work to be completed prio

The Work performed under this Contract has been reviewed and found, to th
to be substantially complete. Substantial Completion is the stage in the progre
thereof is sufficiently complete in accordance with the Contract Documents
intended use. The date of Substantial Completion of the Project or portion t

August 1, 2002

which is also the date of commencement of applicable warranties required b

Roof warranty as provided by Phoenix I Restoration and Construction, Ltd. fo

A list of items to be completed or corrected is attached hereto. The failure to in
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County Warranty Management

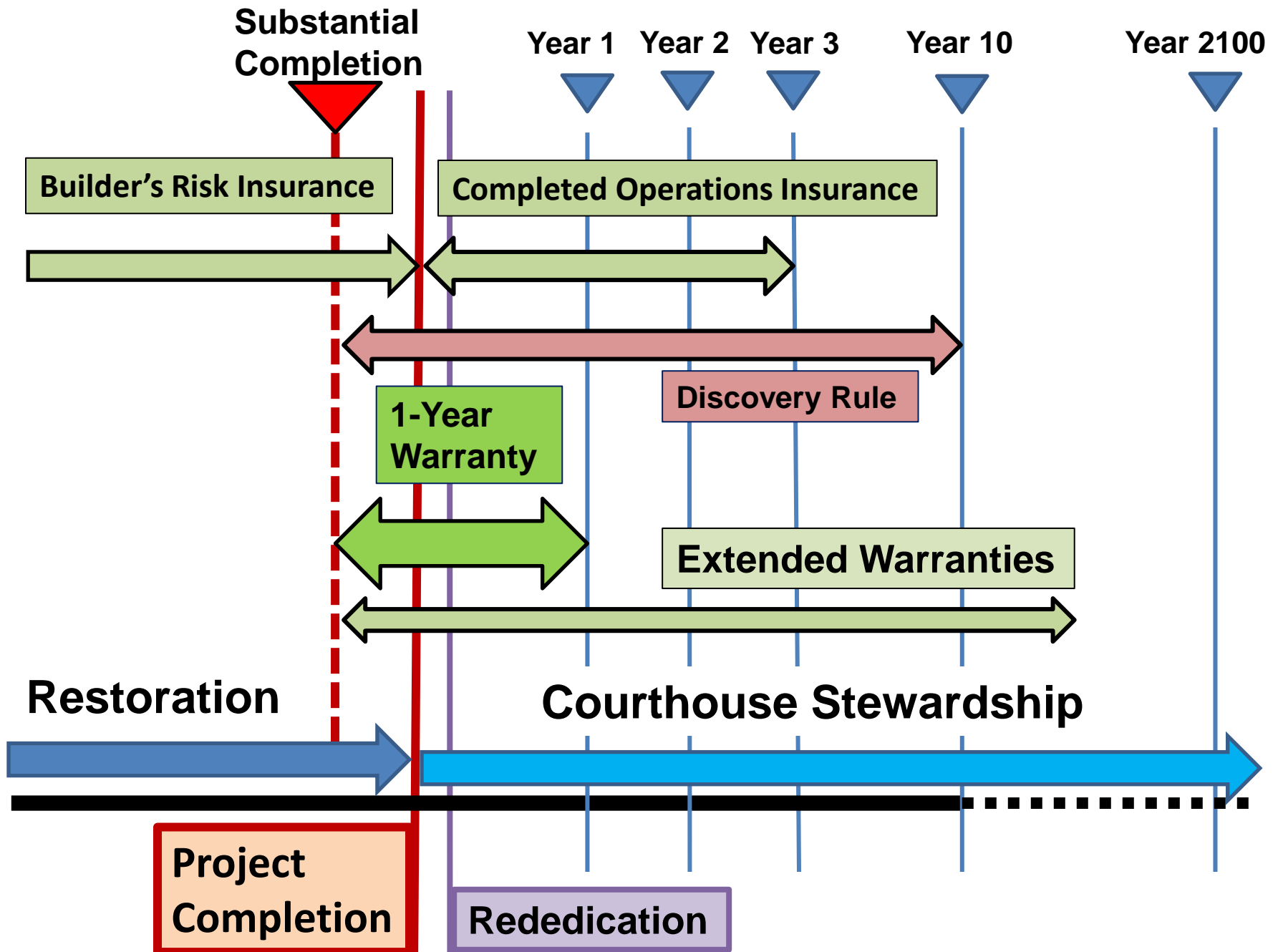
- Find Limits of Coverage & Length of Warranties
- Report Warranty Items – **IN WRITING!** To General Contractor; copy Architect, Engineer, THC
- Provide written description and photographs
- Keep Record of all Correspondence with Contractor, Insurance Reps, Subs, A/E
- Require Repair to be in Compliance with Specs
- Work by others may void the warranty
- Don't Wait to Report Problems

• Managing the Transition from Restoration, Back to the County

- **Managing the Conclusion of the Restoration**
- **Taking Full Advantage of Provisions in the Restoration Contract**
 - **Insurance**
 - Drawings & Records
 - 1-Year Warranty Inspection
 - Extended Warranties
- **Preparing for Predictive & Preventive Maintenance of Restored Condition**
- **Setting Up Stewardship Library to Support Funding and Maintenance**

Contract Provisions Up To & Beyond Completion

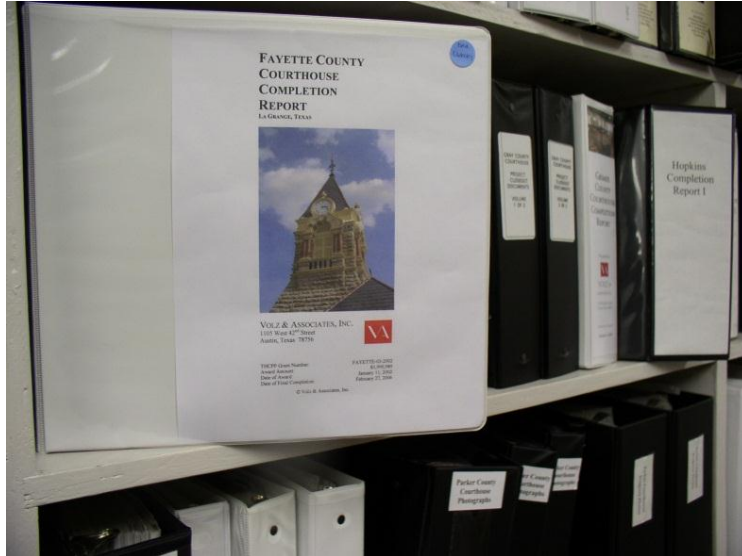
- ❖ **Insurance** – Review terms & and expirations
- ❖ **Builder's Risk Insurance** – Coverage for loss or damage during Restoration; ends with final payment.
- ❖ **Completed Operations Insurance** – 2 or 3 year coverage for injuries or damage to property occurring after the Restoration resulting from flawed materials or installation.
- ❖ **"Discovery Rule"** – Discovery of defects in materials or workmanship discovered before the 10th anniversary of the Substantial Completion date.



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Contents of Basic Stewardship Library



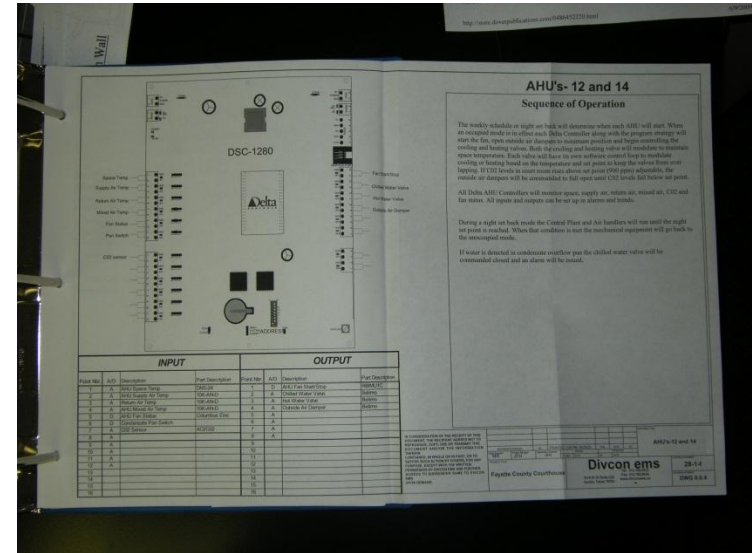
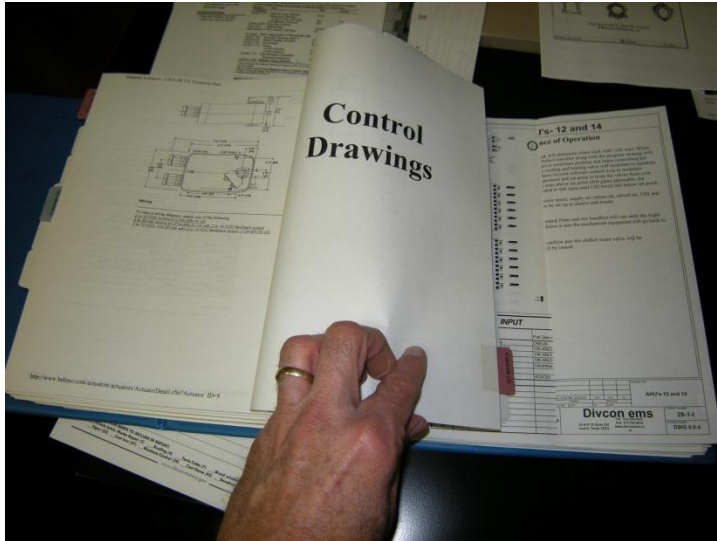
Basic Library **Intentionally** Provided by Restoration Process

- Restoration “Completion Report”
- Closeout Documents – As-Built Drawings, Submittals, Shop Drawings, Progress Photos, Restoration Bid Documents / Cost Breakdown/ Pay Applications, Assessments & Technical Analysis, O&M Manuals

Prior Documents

- Master Plan
- Original & Past Remodeling Drawings & Specs
- Photograph Collection – Earliest through Pre-restoration

Operation & Maintenance Manuals



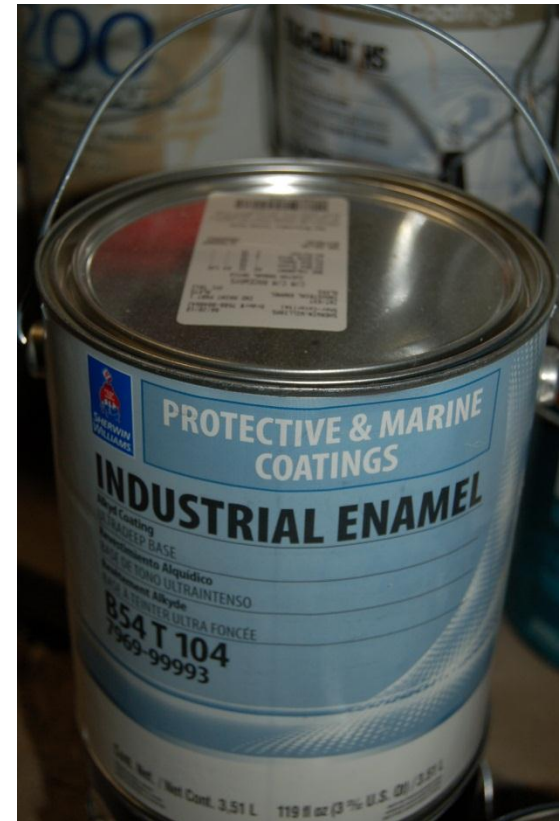
- Restoration Specifications List Manuals & Training
- Insure Adequate Training, Utilizing Manuals
- Manuals May be On-Line
- Arrange Retaining Periodically
- Train Back-up Staff



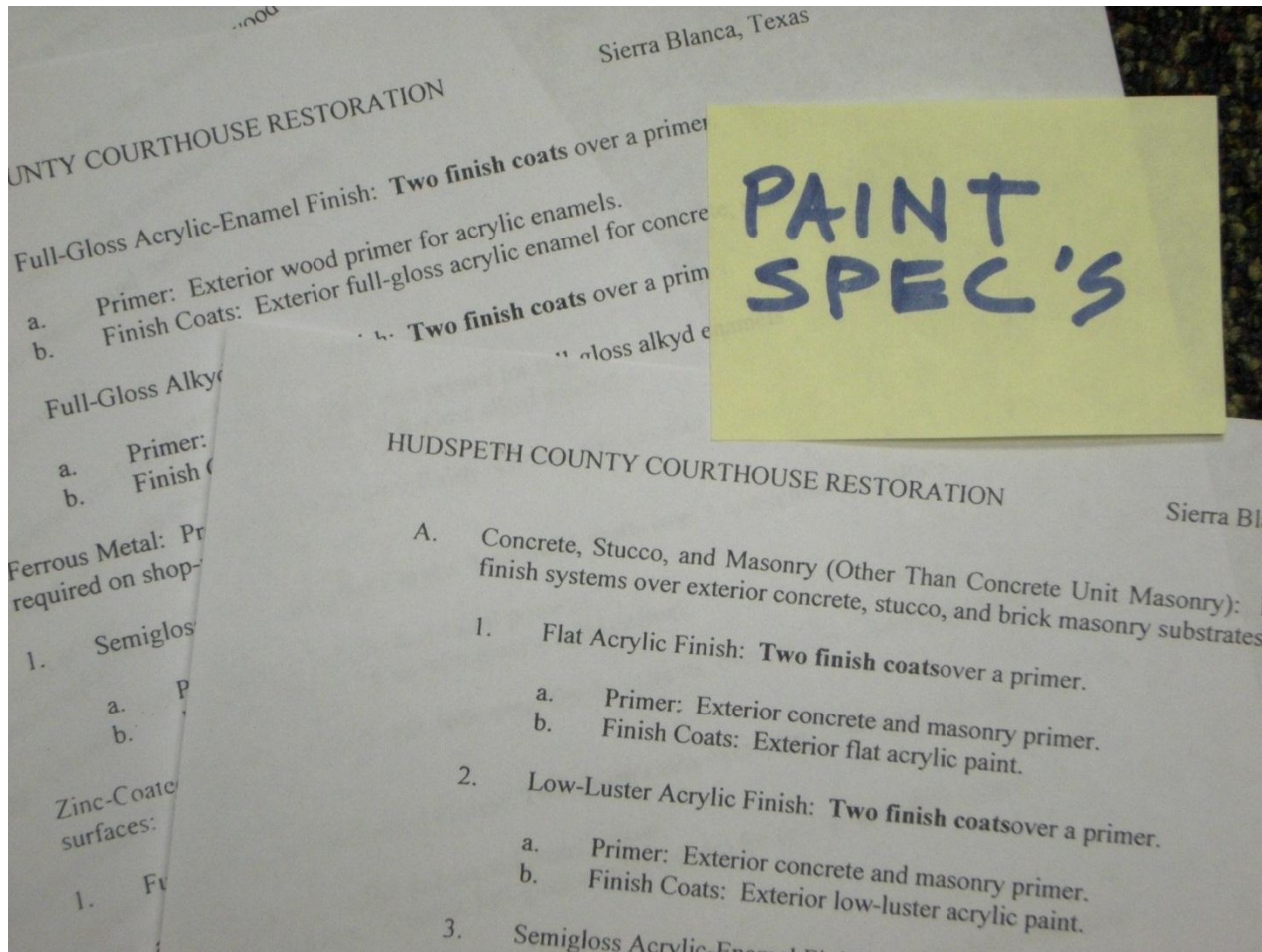
Information for Early Maintenance Needs



Paint Schedule for Maintenance



Paint Specifications



Submittals, Samples Material, Extra Materials

Example – Paint Materials



More than 6 colors
in this tower photo
alone – Bosque CCH

Numerous & detailed
photographs taken
after completion will
help with future
painting needs.

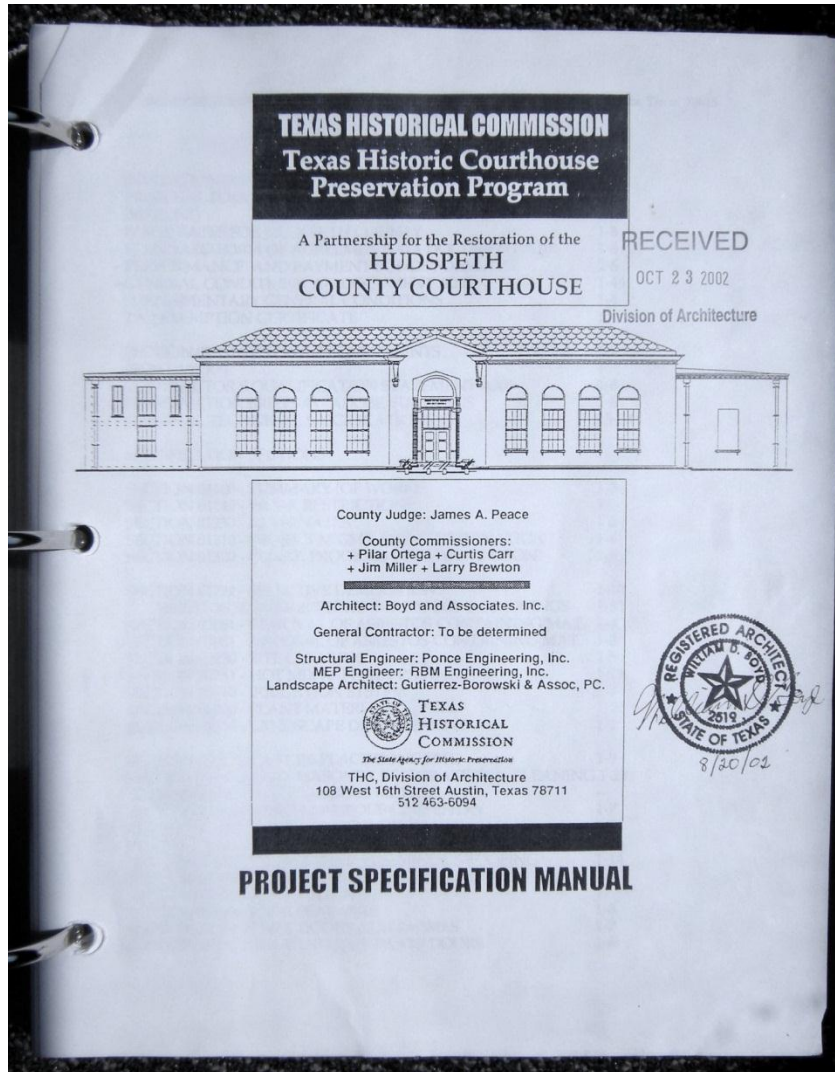
Verify Final Paint
Schedule

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Managing 1-Year & Extended Warranties

Find Warranties in Project Specifications & Completion Report



CSI MASTERFORMAT 1995 EDITION
Master Format was composed of
16 primary divisions:

- Division 01 — General Requirements
- Division 02 — Site Construction
- Division 03 — Concrete
- Division 04 — Masonry
- Division 05 — Metals
- Division 06 — Wood and Plastics
- Division 07 — Thermal and Moisture Protection
- Division 08 — Doors and Windows
- Division 09 — Finishes
- Division 10 — Specialties
- Division 11 — Equipment
- Division 12 — Furnishings
- Division 13 — Special Construction
- Division 14 — Conveying Systems
- Division 15 — Mechanical
- Division 16 — Electrical

1 – Year Warranty Inspection



1-Year Warranty Management

- Find limits of coverage & time covered
- Report Warranty Items – **IN WRITING!** To General Contractor; copy Architect, Engineer, THC
- Provide written description and photographs
- Keep record of all correspondence with Contractor, Insurance reps, Subs, Architect and Engineers
- Require repair to be in compliance with specs
- Work by others may voided the warranty
- Don't wait to report problems

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EXTENDED WARRANTIES –



- **Roof Extended Warranty Example**

Specs.-20yr. **Manufacturer's** Warranty

HUDSPETH COUNTY COURTHOUSE RESTORATION

Sierra Blanca, Texas

1.9 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.

1.10 WARRANTY

- A. **Special Warranty: Manufacturer's standard form,** without monetary limitation, in which manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within specified warranty period. Failure includes roof leaks.
 - 1. Special warranty includes roofing membrane, base flashings, **roofing membrane accessories, fasteners** and other components of roofing system.
 - 2. **Warranty Period: 20 years from date of Substantial Completion.**

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

Specs. – 20yr. **Installers** Warranty

HUDSPETH COUNTY COURTHOUSE RESTORATION

Sierra Blanca, Texas

- C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

3.11

ROOFING INSTALLER'S WARRANTY

- A. WHEREAS <Insert name> of <Insert address>, herein called the "Roofing Installer," has performed roofing and associated work ("work") on the following project:

1. Owner: Hudspeth County, Texas.
2. Address: Sierra Blanca, Texas
3. Building Name/Type: Hudspeth County Courthouse.
4. Address: Sierra Blanca, Texas.
5. Area of Work: Entire Roof.
6. Acceptance Date: <Insert date.>
7. Warranty Period 20 years.
8. Expiration Date: <Insert date.>

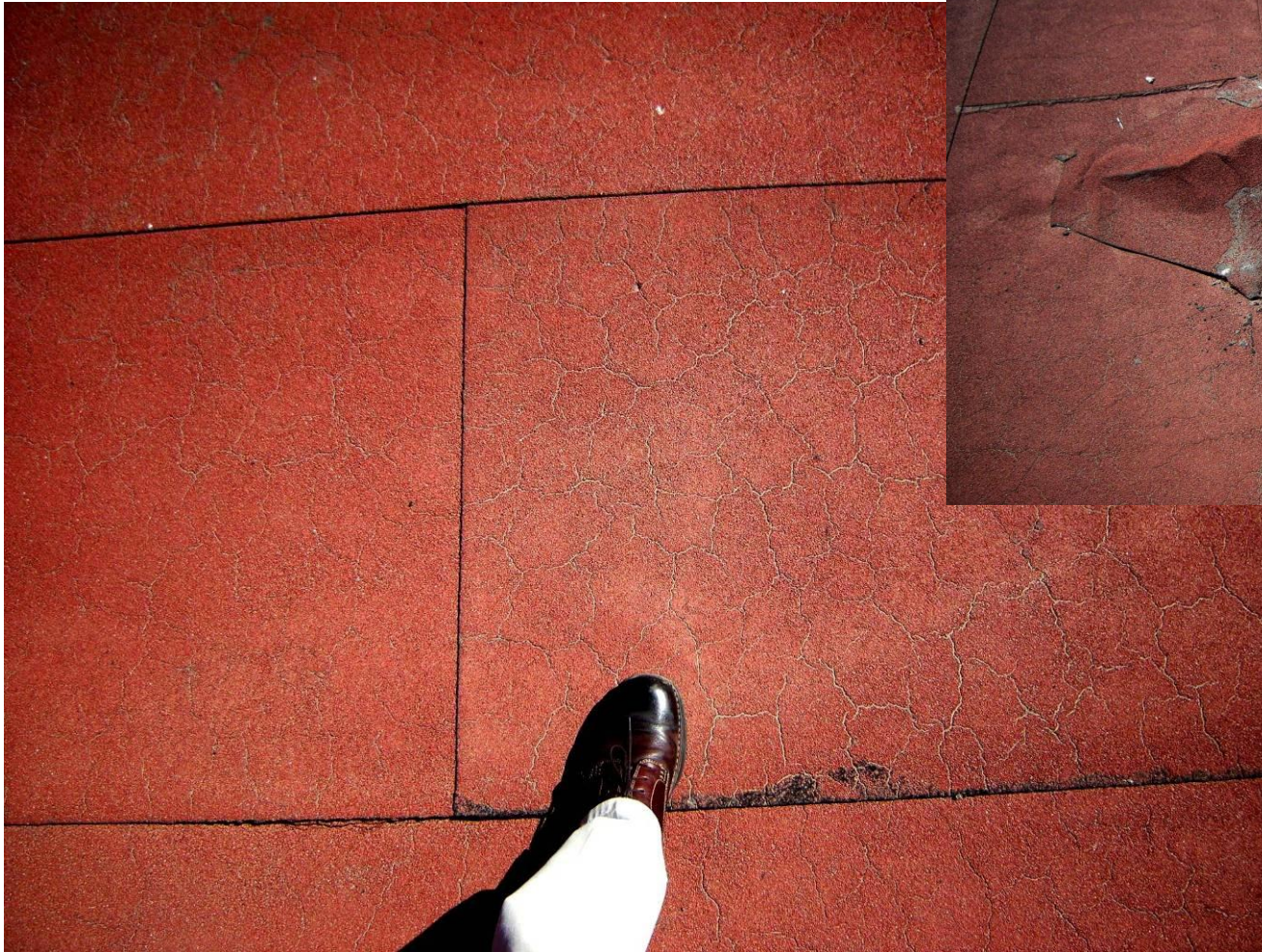
- B. AND WHEREAS Roofing Installer has contracted (either directly with Owner or indirectly as a subcontractor) to warrant said work against leaks and faulty or defective materials and workmanship for designated Warranty Period.

- C. NOW THEREFORE Roofing Installer hereby warrants, subject to terms and conditions herein set forth, that during Warranty Period he will, at his own cost and expense, make or cause to be made such repairs to or replacements of said work as are necessary to correct faulty and defective work and as are necessary to maintain said work in a watertight condition.

- D. This Warranty is made subject to the following terms and conditions:

1. Specifically excluded from this Warranty are damages to work and other parts of the building, and to building contents, caused by:
 - a. lightning;
 - b. peak gust wind speed exceeding 90 mph (m/sec);
 - c. fire;
 - d. failure of roofing system substrate, including cracking, settlement, excessive deflection, deterioration, and decomposition;

20-Yr. Roof Warranty ?



After 5 yrs. Will It Last 20 years?

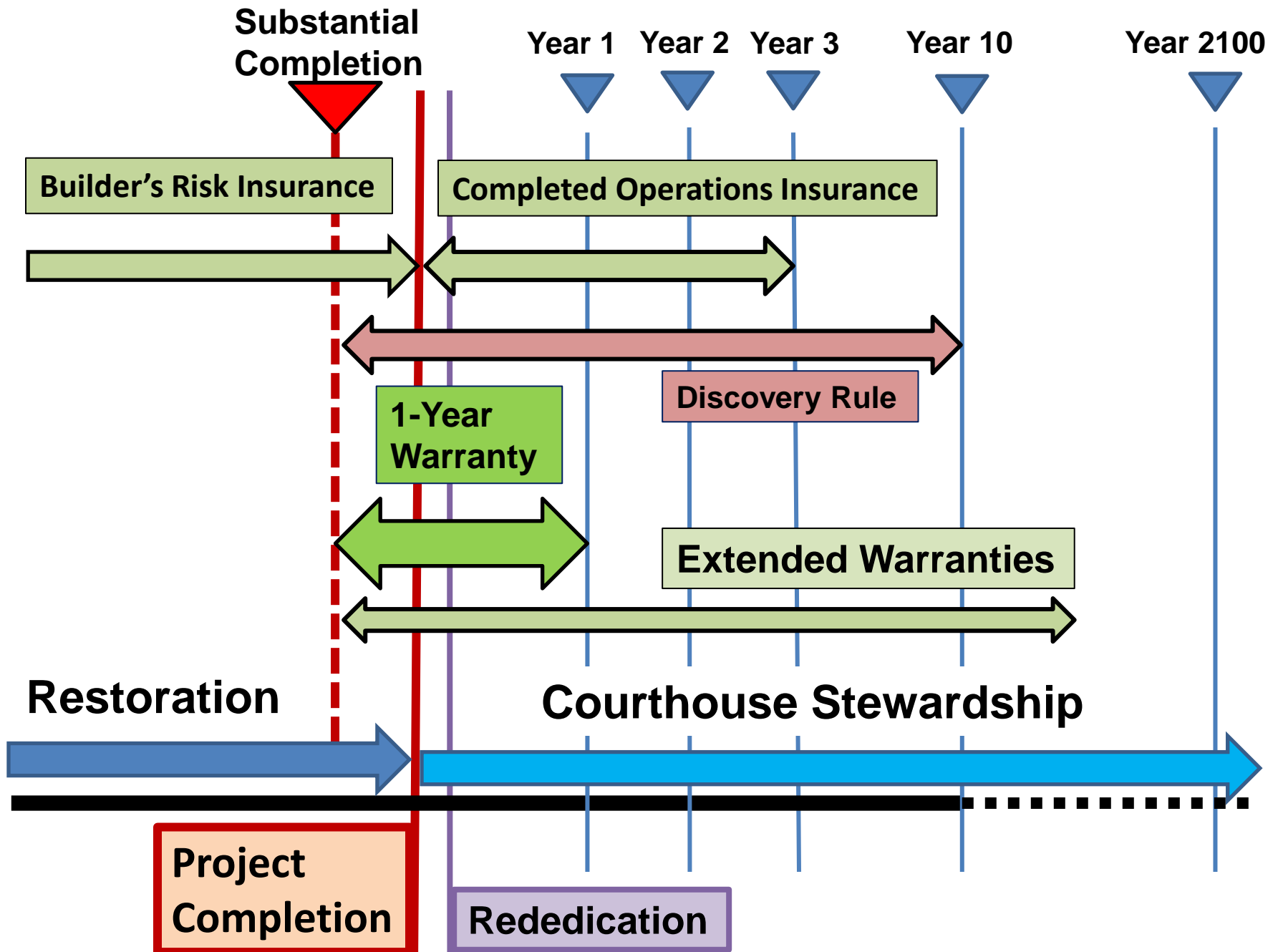


Extended Warranty Reference Sheet (beyond General 1-year Warranty)

Material, Installer, or System Warranty	Length of Warranty	Start Date	End Date	Contractor Contact Info & Notes
(Examples)				
Roofing -				
Flat Roof - Type 1, Material and/or Installer				
Sloped Roof - Type 2, Material and/or Installer				
Sheet Metal Flashing				
Roof/Topper Paint				
Specialized Roof Paint				
Plumbing -				
Plumbing Fixtures				
Plumbing Valves & Faucets				
HVAC -				
Hydronic water treatment service				
Boilers, Heat Exchangers				
Air Cooled Water Chillers				
Fan Coil Units and Motors				
Controls System				
Fire Alarm System Equipment				
Elevator Equipment				
Door Hardware & Closures				
Clock & Bell				
Mirror Silver Spoilage				

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Life Expectancy & Maintenance Planning

- **Planning Tool to Forecast Costs**
- **Regular Maintenance Makes Cost More Predictable**
- **Preventive Maintenance
Intentionally Extends Expected Life**
- **Plan to Use Dollars Wisely Using a Long-Term View of Maintenance**

HVAC System Components



Fan Coil Unit



Circulating Pumps



Heat Pump

HVAC – Hydronic System Chiller



Roof Repair and Replacement



Life Expectancy Components & Systems *

Rough Estimate Examples -

2-5 Years

- Light Fixture Re-lamping
- Exterior Paint
- Window Paint

5-10 Years

- Sealants
- Window Repair
- Condensate pumps

8-10 Years

- Emergency Lighting Batteries

15-20 Years

HVAC Systems

- Heat Pump & Split Systems
- Roof Top Package Units

Other

- Single-Ply Membrane Roofing
- Build-up Roofing
- Asphalt Shingles
- Circulating Pumps
- Water Heater
- Security Systems / Video

20-25 Years

- HVAC Fan coil units
- Plumbing Faucets
- Exhaust Fans
- Modern Door Hardware
- Fire Alarm System

30-50 Years

HVAC Systems

- Hydronic Chillers & Boilers
- Hydronic Piping
- Ground Source Heat Pump

Other

- Fire Sprinkler System
- Historic Window & Door Hardware
- Electrical & Telecom
- Sheet Metal Roofing & Flashing

40-50 Years

- Elevator

50-75 Years

- Wood Floors
- Clay / Concrete Tile Roofing
- Slate Roofing

*** With Regular Maintenance**

Final Cost Analysis – Doors & Windows

Find in Completion Report

c. Other		\$59,610.00	(custom cabinets)
7. Thermal & Moisture Protection			
a. Roof			See metals for additional roofing
Metal roofing	\$88,800.00	\$32,542.00	General roof/flashings - sub
Downspouts	\$5,000.00		Allow
d. Insulation & damp proofing	\$7,500.00		Insulation allow
e. Other	\$6,930.00	\$8,637.00	Sealants at doors and windows
8. Doors & Windows			
a. Exterior Doors	\$15,000.00		New doors at entries
b. Interior Doors	\$40,215.00		Wood door restoration and replacement
		\$112,100.00	(final pay app. gave lump sum for doors)
		\$7,200.00	(all glass storefront)
c. Windows			
Demo existing	\$1,750.00		Demo existing non-historic windows
New windows	\$229,910.00		Replicate
		\$310,680.00	(final pay app. gave lump sum for windows)
d. Door and Window Hardware	\$48,800.00	\$51,200.00	Restore/replace
9. Finishes			
a. Exterior	n/a		n/a see paint
b. Interior			
Plaster	\$75,000.00	\$200,900.00	Restore
Floors	\$84,980.00	\$26,690.00	Restore (includes tile and concrete floors)
Paints and coatings	\$205,000.00	\$112,277.00	Inc paint analysis (includes painting stair)
c. Other		\$48,250.00	(drywall)
10. Specialties			
a. Restroom specialties	\$3,675.00	\$5,350.00	Fixtures and partitions

Restoration
Project
Windows Cost
\$3,500 each

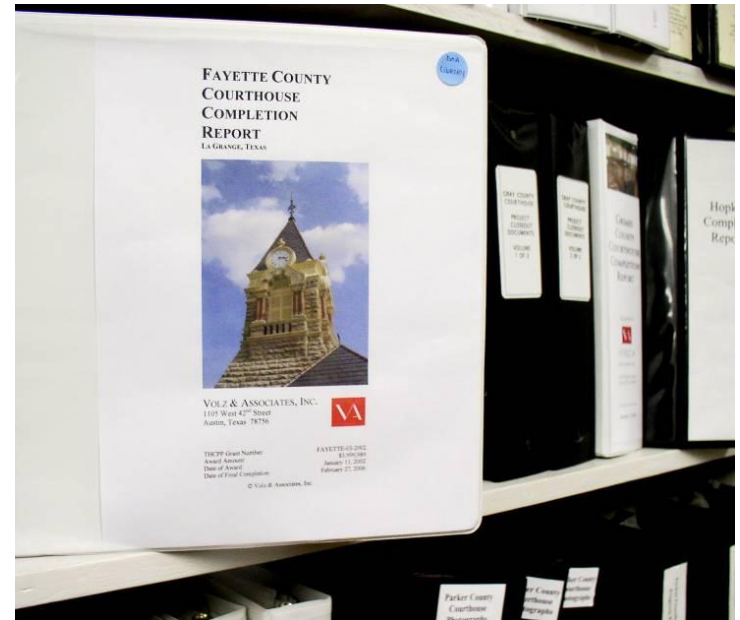
Restoration
Project **Doors**
Cost \$6,000
pair

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- Gift to Future Courthouse Stewards



Restoration Accomplished -

- Your Restoration **corrected & restored** most deteriorated conditions
- The Restoration may have only returned the CCH back to **“a maintainable condition”**
- **Maintenance begins immediately** and goes on for the long future – the goal of the restoration!
- Maintenance of a CCH requires **continual management** to stay on top of the conditions

Courthouse Stewardship is about the County's Future

- **Maintaining Restoration Appearance**
- **Maintaining Full Function**
- **Controlling Costs thru Planned and Preventive Maintenance**
- **Maintain County Constituent Support for Funding Maintenance**
- **Fostering Tourism and Good Business Climate**
- **Increasing County Image and Pride**
- **Gift to Future Stewards, Officials & County Residents**

Managing the Transition from Restoration Back to County

A Look to the
Future-



Dennis Cordes, THC